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(54) Title: BNP AGONISTS

(57) Abstract: The present invention relates to dipeptidyl peptidase resistant BNP agonists, their synthesis and therapeutic applications thereof. In particular the present invention relates to compounds of formula (I): R-Xaa1-Xaa2-Xaa3-Pep-OH; wherein R is selected from the group comprising hydrogen, acetyl, formyl, or alkyl, wherein Xaa1 is an amino-acid selected from serine, alanine, threonine or asparagine, Xaa2 is a L-amino acid or a D-amino acid, different from L-proline, L-alanine, L-glycine or L-serine, optionally substituted by at least one substituent selected from alkyl, aryl or acyl, and Xaa3 is a L-amino acid or a D-amino acid, optionally substituted by at least one substituent selected from alkyl, acetyl, or aryl, wherein Xaa1, Xaa2, Xaa3 are linked to each other by peptide bonds or pseudo-peptide bonds, and wherein Pep is a peptide sequence comprising not more than 29 amino acid residues said sequence comprising a disulfide linked ring structure said ring comprising between 12 and 20 amino acids, wherein the disulfide bond is formed by two cysteines.



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International application No

PCT/EP2006/003473 A. CLASSIFICATION OF SUBJECT MATTER INV. C07K14/58 C07K7/08 A61K38/22 A61P9/04 A61P13/00 A61P9/08 A61P1/16 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) C07K A61K A61P Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, Sequence Search C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. χ WO 2004/011498 A (CONJUCHEM INC; BRIDON, 1-23 DOMINIQUE, P; BAKIS, PETER; CARÉTTE, JULIE; LEC) 5 February 2004 (2004-02-05) the whole document χ WO 00/69900 A (CONJUCHEM, INC; BRIDON, 1-9.14.DOMINIQUE, P; EZRIN, ALAN, M; MILNER 18-23 PETER, G) 23 November 2000 (2000-11-23) page 31, line 15 - page 32, line 2; claims; sequences 475-524 -/--Х Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 19 September 2006 11/10/2006

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